



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,834	06/26/2000	Michael Kraus	39727/DBP/E43	2410

23363 7590 09/10/2003

CHRISTIE, PARKER & HALE, LLP  
350 WEST COLORADO BOULEVARD  
SUITE 500  
PASADENA, CA 91105

EXAMINER

OROPEZA, FRANCES P

ART UNIT	PAPER NUMBER
----------	--------------

3762

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/603,834

Applicant(s)

KRAUS ET AL.

Examiner

Frances P. Oropeza

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7/7/03 (Amendment) and 8/11/03 (RCE).
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-5, 7 and 9-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-5, 7 and 9-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. The Applicant's submission filed on 8/11/03 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. Claims 2-5, 7 and 9-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

Independent claims 21 and 23 include the limitation of "the first transmitter/receiver unit beginning data transmission by sending a triggering signal to the second transmitter/ receiver unit repetitively at the end of a first pre-determined time interval". The Applicant notes in his Remarks/ Arguments filed 7/7/03 that support for the amendment can be found on pages 24-30 of the specification and continues that the amended/ new claims are described in the specification ... such that the invention is particularly pointed out and distinctly claimed. The Examiner notes that while the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

Claims 2-5, 7 and 9-23 are indefinite because it is not clear what is done repetitively and what enables the invention to move from repetitively doing something to proceeding with the other portions of the data transmission process. Claims 21 and 23 are read such that the first

transmitter sends the triggering signal repeatedly after the end of the first time period, but it is not clear when the first transmitter stops sending the triggering signal. In reading the sections of the specification referenced by the Applicant, it appears the triggering signal is repeated by the first transmitter/ receiver unit only if the data is invalid (specification – page 25, lines 3-5, page 26, lines 1-3). If the data is invalid and the number of renewed transmission attempts exceed a predetermined number, the data is not repeated even if it is invalid (specification – page 24, line 27 – page 25, line 2). Clarification is needed and appropriate correction is required.

3. The remaining limitations of claims 2-5, 7 and 9-23 appear to be previously examined limitations, hence a clear understand of “repetitively” is essential for continued examination. Based on a lack of understanding by the Examiner, the rejection shown below generally reflects the rejection of record.

As to the Applicant’s argument regarding a first item of control information, the synchronization code is read as the first item of control information; the control information relating to the serial number of the implant (col. 17 @ 20 – 47).

As to de Coriolis, the Examiner is unable to follow the Applicant argument related to renewed transmission of data as a specific claim was not identified with the arguments.

***Claim Rejections - 35 USC § 103***

4. Claims 2-4, 7, 9-17 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nappholz et al. (US 5113869) in view of de Coriolis (EPO 0607638).

Nappholz et al. disclose an implantable ambulatory monitor. The telemetry receiver/transmitter performs two-way, digital telemetry to transfer data and programs between

the implant and an external device. (col. 16 @ 25-27). The microprocessor of the implant triggers communication with an external device using a beacon signal indicating the reception readiness of the implant, and uses two intervals to control the receiving portion of the implant receiver/transmitter (col. 16 @ 61 – col. 17 @ 6). The reception readiness of the implant is controlled by the synchronization sequence, read as “at least one first item”, sent by the external device (col. 17 @ 13-47). The external receiver/transmitter is substantially permanently ready for data exchange (col. 17 @ 22-25). The implant initiates communications with an external device to provide a warning about abnormal conditions or about implant malfunction (col. 16 @ 34-44). Data communications can be initiated by the implant (col. 21 @ 31-43).

As discussed in the previous paragraph of this action, Nappholz et al. disclose the claimed invention except for:

- the triggering signal including a first data set (claim 4),
- implementing a first plausibility check (claim 21 and 23),
- implementing renewed transmissions if the power supply is not exceeded (claim 9),
- checking the data (claim 10),
- sending a second acknowledgement (claim 11),
- implementing a second plausibility check (claim 12),
- effecting a new transmission when a defective transmission is established (claim 13),
- effecting renewed transmission after expiry of a waiting time period (claim 14),
- after renewal of the transmission, repeating the method steps (claim 15), and
- upon non-reception of transmissions, prolonging the transmission (claim 17).

De Coriolis discloses a telemetry system for an implantable device including an implant device receiver (44) and transmitter (46) and an external programmer receiver (32) and transmitter (34). The telemetry circuit is used intermittently and contains a wakeup command transaction to enable full activation of the telemetry means (28) (col. 10 @ 49-59). During periods of quiescence, the telemetry means, at spaced apart time intervals, enters a partially active state to detect energy transmissions. If energy is detected, further detection occurs seeking the transmitted initiation command. Once the initiation command is detected, the telemetry system becomes fully active, the receiver sends a response code and the communication transaction begins (col. 11 @ 1-22; col. 20 @ 14-26). The outbound data packet is grouped in fixed length frames, read as intervals, with a preamble (58), a data field (62), a control byte (64), a frame check (containing error code to trigger resending of the data, read as a first acknowledgment) and a postamble (68) used for error detection (col. 12 @ 9-33). The inbound data packet contains a leading flag (74), a data field (78), a control byte (76), a frame check (80) (containing error code to trigger resending of the data, read as a second acknowledgment) and a trailing flag (82) (col. 14 @ 2-12). The preamble (58) and the leading flag (74) are read as the triggering signals; this frame contains a first data set and second data set respectively in the data fields. The stay awake signal is read as the waiting time interval (col. 21 @ 37-41). In is inherently understood transmission would not take place in a low battery scenario as therapeutic operations of the implant take priority. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the implantable ambulatory monitor as taught by Nappholz et al., with the specifics of the signal modulation and system component interaction to enable signal transmission as taught by de Coriolis so a known and

proven means of signal modulation and system component interaction is adopted to enable data transfer between the implanted device and the remote external unit so the patient's condition can be evaluate the patient's care optimized.

5. Claim 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Nappholz et al. (US 5113869) in view of in view of de Coriolis (EPO 0607638) and further in view of Fountain et al. (US 4625730). As discussed in paragraph 4 of this action, modified Nappholz et al. disclose the claimed invention except for the triggering signal being initiated by the wearer.

Fountain et al. disclose an ECG recording controller and teach that it is known to provide a manual means for initiating a triggering pulse to begin a transmission when the patient perceives an emergency situation (abstract; col. 6 starting @ 23). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the implantable ambulatory monitor as taught by modified Nappholz et al., with the manually initiated emergency signal as taught by Fountain et al. to provide a system with a means that enables the patient to get help when he perceives help is needed.

6. Claim 18 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Nappholz et al. (US 5113869) in view of in view of de Coriolis (EPO 0607638) and further in view of Wyborny et al. (US 5354319). As discussed in paragraph 4 of this action, modified Nappholz et al. disclose the claimed invention except for the intervals varying in length.

Wyborney et al. disclose a telemetry system and teach that it is known to use variable interval lengths (col. 5 @ 53-58). Therefore it would have been obvious to one having ordinary

Art Unit: 3762

skill in the art at the time the invention was made to modify the implantable ambulatory monitor as taught by modified Nappholz et al., with the variable interval lengths as taught by Wybroney et al. to compress the frame length so more data can be transmitted in a fixed time.

*Claim Objection*

7. Claim 23 is objected to because in line 7 it appears "repetivelyly" should be --repetitively--.

*Statutory Basis*

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

*Conclusion*

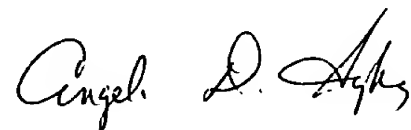
Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Fran Oropeza whose telephone number is (703) 605-4355. The Examiner can normally be reached on Monday – Thursday from 6 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Angela D. Sykes can be reached on (703) 308-5181. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 306-4520 for regular communication and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Frances P. Oropeza  
Patent Examiner  
Art Unit 3762

JPO  
9/7/03



ANGELA D. SYKES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700